

## **SUMMARY**

Knowledge has puzzled people from ancient times but only recently it is looked upon as a basic economic resource.

Intellectual Property Rights (IPR) are the proprietary part of knowledge.

Patents for inventions are part of IPR but because of their controversial nature – tangible (material) in substance (a product or a process of the physical world), intangible (information) in presentation, legal in circulation and economic in utilization, they require a separate presentation.

The article starts with a selected overview of epistemology and the innate features of human reason, continues with a presentation of the basic characteristics of the knowledge economy, argues further about the patent system as an instrument for the commoditization of inventions and ends with economic and legal issues of relevance for patents.

The reasons for an IP Managers to a look at the interdisciplinary nature of inventions are manifold: a) because knowledge is a typically human expression, but being only a part of human nature it is highly contested, admired or feared, b) because inventions affect the physical world, but their impacts come into being in society and have substantial economic and legal consequences, c) because of communication between cultures and d) because of the time arrow.

An emerging profession – that of an IP Manager is the underlying occasion for this presentation in a collective effort to draw a comprehensive picture.

## **CONCLUSION**

IP Managers will be at the forefront of technological development. They will be strained between many extremes- the search for the “leaders” and the necessity to extract value, the optimism for technical development and the skepticism, the cultural interactions and the cultural misunderstandings, the everlasting contradictory views on patents between technicians, economists, lawyers, philosophers and last but not least the public opinion, just to mention some.

The knowledge economy not only influences our lives, but requires different solutions and regulations, changes concepts and professions.

To present this broader context of explanation has been the purpose of this presentation. And the extract for the practical work of an IP Manager from this interdisciplinary approach is contained in the following conclusions:

### **1. Philosophical (epistemological) conclusions**

a) Inventions are a synthetic proof of the truth of knowledge of natural science laws underlying their construction

b) Inventions are a proof of the cumulative character of knowledge- the time arrow

### **2. Economic conclusions:**

a) The patent system converts the knowledge of an invention into a commodity (good), enabling quick inclusion in the market economic processes.

b) Inventiveness as a requirement for granting of patents has economic parameters and can serve as an early indicator by the assessment of value potential of an invention.

c) Self employment opportunity costs serve as a lower limit for wages of knowledge workers

### **3. Legal conclusions:**

- a) The patent system contains two regimes of appropriation
    - public good with free access for codified knowledge contained in the patent script and
    - private good for all forms of commercial embodiments of the patent script.
  - b) Justification of novelty and industrial applicability requirements, as reflecting the personal rights of property, dignity and freedom, is based on natural law considerations
  - c) Justification of inventiveness requirement is based on utilitarian considerations
4. Methodological conclusions:
- a) AN IP Manager has to be able to “translate’ high tech knowledge in basic, innate human needs that create value.
  - b) an IP Manager has to search, find and accompany “IP leaders” having their expressions in our classical human framework of time and space.

### ***1.1. Commoditization Theory of the Patent System***

Through the description and the claims the patent script ( the knowledge) turns into “an ideal image” of the material product or process (the “substance”) it describes representing with a high degree of reliability its actual physical features and boundaries.

The requirements for novelty and inventiveness guarantee the identification of the “ideal image” as an unique object with respect to anything known until then as a prior art. A major consequence is the uniqueness and identification also of all embodiments of the “substance”.

The industrial application requirement states that the invention as a “substance” can satisfy needs and has utility in that specific field.

The substantial examination with its requirements for embodiment, replication and the examples thereof guarantees the existence of identity between the “ideal image “and the “substance”.

We receive, figuratively speaking, a “seal of nature” for the truth of the underlying knowledge of laws of nature. This is the proof denied by Popper.

The granting of the patent is an official confirmation by an institution in the respective country- the Patent Office- of that identity.

The tacit knowledge is presupposed and included in the substantial examination in the figure of “the person of average skill in the art”

Further the patent, as a legal instrument, is the granting of an exclusive right on the “ideal image” on the territory of the respective country.

The patent system gives also a value of the patent for invention. That value is twofold. Differentiating between the “substance” and the granted on the basis of the “ideal image” patent we can consider that the lowest boundary is the value of the expenses connected with the granting, maintenance and enforcement of the patent, of the “ideal image” together with the attached to it exclusive rights.

The potential “real value” of the protected by a patent invention will be defined if an appropriation mechanism for the exploitation of the “substance” in the business circle is being found.

Let us turn now to the features necessary to characterize something as a “good” or “commodity”

- it has to have ownership
- it has to be an identifiable object

- it must have value
- it must be able to satisfy needs or create demand

Now it comes to a presentation of the invention as described above in the features of a “good”:

- it has ownership – the patent representing an exclusive right on the “ideal image”, e.g. on the knowledge.
- it is an identifiable object- the invention both as an “ideal image” and as “substance” since the substantial examination confirms that identity between form and substance, as well as the uniqueness of the invention in comparison to the existing objects.
- it has value- as already established, it can be defined only as a value of the exclusive right in itself or as its combination with the “substance” that can find a utilization in the economy.
- It can satisfy needs- here is the peculiarity. The statement here is that generally to satisfy needs can only the “substance” since only the concrete product or process enters the industrial process, has measurable economic characteristics, has utility and can generate demand.

So for example by buying a patent for a battery, we buy the product battery with its economic and technical characteristics, since the production of batteries is the need we satisfy and not the eagerness to learn more.

Even in a negative case, when purchase or protection happens with blocking intentions, the reason behind is to safeguard our own products or processes.

Here and everywhere the exclusive right is the instrument that takes the knowledge of the invention out of the public goods. But since this instrument is potentially one and the same for all inventions it plays a key role mainly by the establishment of ownership.

Considering the economic realization its main function seems to be that of a multiplier.

In this way the invention is presented as an identified physical object ( a “substance”) and as knowledge presented in an intangible, codified information form ( an “ideal image”) , that can be embodied, can satisfy needs, can create demand and has a value.

The features of the category “good” or “commodity” are covered and hence the claim for a “Commoditization theory of the patent system” for its explanation.

The Patent System is in first place an instrument to produce goods. It should not be forgotten when discussing patents since they are, independently from their specifics, at the end as “fair” or “unfair” as any other goods are “fair” or “unfair”.

As to the patent as a quasi monopoly this aspect will be treated in economics.

Patents are the best proof for Kant’s insight that reason can achieve objective knowledge” the things as they are” “das Ding an sich”. A “patent description” is the name of the justification of the truth of underlying knowledge on natural science laws. The doubtful should have shared their concerns with the astronauts by their walk on the moon,

Turning back to the metaphor of knowledge as a building, then the substantial examination guarantees that there is no coincidence or overlapping of the apartments one acquires and that each new patent certifies an apartment on a floor higher than the present prior art floor.